



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/734,579	12/13/2000	Masayuki Shibuta	2000-1704A	6499

7590

10/23/2002

WENDEROTH, LIND & PONACK, L.L.P.
Suite 800
2033 K Street, N.W.
Washington, DC 20006

EXAMINER

ELKASSABGI, HEBA

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 10/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/734,579

Applicant(s)

SHIBUTA, MASAYUKI

Examiner

Heba Elkassabgi

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 August 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

The corrected or substitute drawings were received on 08/08/2002. These drawings are accepted by the examiner and the drawing objection is withdrawn.

Specification

The substitute specification filed 08/08/02 has not been entered because it does not conform to 37 CFR 1.125(b) because: The statement as to a lack of new matter under 37 CFR 1.125 (b) is missing.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Vibrator of a motor that is integrally coupled to a rotating shaft with caulked groove portions formed in the eccentric load.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 9-28 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the

application was filed, had possession of the claimed invention. The subject matters of the inner surface, outer surface, end surface first end, second end, recess, first side, second side, first end of end surface, and second end of end surface.

Claims 9-28 rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure, which is not enabling. The subject matters of the inner surface, outer surface, end surface first end, second end, recess, first side, second side, first end of end surface, second end of end surface, and whether the shaft of the end portions are semi-cylindrical in claims 26-27, are critical or essential to the practice of the invention, but not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The subject matters of the inner surface, outer surface, end surface first end, second end, recess, first side, second side, first end of end surface, and second end of end surface need to be described in the specification in a full, clear, concise, and in exact terms to be enabling.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9,10,11,12, 13,14, 21,22,25,26,27, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Kashimura J.P. Application 10313549.

Kashimura discloses in Figure #2 and #4d, a vibration generating device for a small wireless machine (1) having an eccentric load portion with two side walls (8) extending from the eccentric load portion, where each side wall (8) has an inner surface, such that a groove (6a), has an open end and a bottom that is defined between the inner surface of the sidewalls (8), and an outer surface. An end surface interconnecting the inner surface and the outer surface that is positioned at a level relative to the bottom of the groove. The end surface having a first end and a second end with a caulked portion extending into the groove (6) from a location that between the inner surface and the outer surface. The caulked portion is positioned at a level that is closer to the bottom of the groove than the level at which the end surface is positioned along an intersection of the end surface and the outer surface. The end surface is continuous from the first end to the second end; and a motor shaft (3) that is positioned within the groove (5) between the caulked portion of two side walls (8) and the bottom of the groove (6a), so as that the motor shaft (5) is entirely between the bottom of the groove (6a) and the end surface. Where the caulked portions result from deforming respective portions of the two side walls (8) from the open end of the groove (6a) toward the bottom of the groove (6a) in which the shaft (3) is maintained in the groove by the caulked portions, whereby the motor shaft (3) is integrally coupled to the eccentric load portion. In addition Kashimura illustrates in Figure #2 a caulked portion defining a recess (7) which the end surfaces of the recesses have a first side and a second side, and that the first side being nearer to the inner surface and the second side being near the outer surface. The first side having a dimension extending in a direction from the first end of the end surface to the second end of the end surface that is greater than a

dimension of the second side extending in a direction from the first end of the end surface to the second end of the end surface. The groove (6) surrounds the motor shaft (3) at least 180°.

In regards to claims 11,12,13,14,22,2and 27, Kashimura discloses the claimed invention except for the range of the width of the tip portion end surface or the flat surface from the side of the groove. It would have been obvious to one having ordinary skill in the art at the time the invention was made to propose with the desired range, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15,16,17,18,19,20,23,and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashimura J.P. Application 10313549 and further in view of Fukuoka et al. J.P. Application 11089170 A

Kashimura discloses in Figure #2 and #4d,a vibration generating device for a small wireless machine (1) having an eccentric load portion with two side walls (8) extending from the eccentric load portion, where each side wall (8) has an inner surface, such that a groove (6a), has an open end and a bottom that is defined between

the inner surface of the sidewalls (8), and an outer surface. An end surface interconnecting the inner surface and the outer surface that is positioned at a level relative to the bottom of the groove. The end surface having a first end and a second end with a caulked portion extending into the groove (6) from a location that between the inner surface and the outer surface. The caulked portion is positioned at a level that is closer to the bottom of the groove than the level at which the end surface is positioned along an intersection of the end surface and the outer surface end surface is continuous from the first end to the second end; and a motor shaft (3) that is positioned within the groove (5) between the caulked portion of two side walls (8) and the bottom of the groove (6a), so as that the motor shaft (5) is entirely between the bottom of the groove (6a) and the end surface. Where the caulked portions result from deforming respective portions of the two side walls (8) from the open end of the groove (6a) toward the bottom of the groove (6a) in which the shaft (3) is maintained in the groove by the caulked portions, whereby the motor shaft (3) is integrally coupled to the eccentric load portion. In addition Kashimura illustrates in Figure #2 a caulked portion defining a recess (7) which the end surfaces of the recesses have a first side and a second side, and that the first side being nearer to the inner surface and the second side being near the outer surface. The first side having a dimension extending in a direction from the first end of the end surface to the second end of the end surface that is greater than a dimension of the second side extending in a direction from the first end of the end surface to the second end of the end surface. The groove (6) surrounds the motor shaft (3) at least 180°. However, Kashimura does not disclose an eccentric load is a truncated fan having two flat surfaces that correspond to the end surfaces of the sidewalls and at an angle of about 180°.

Fukuoka et al. Illustrates in Figures #3 and #4 a vibration generating motor in an eccentric load portion (1) is of a truncated fan shape having two flat surfaces that correspond to the end surfaces of two side walls and the outer surfaces of the two side walls to form an angle of less than 180° with one another.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Kashimura's invention with the truncated fan shape in order to improve the working efficiency of the motor.

In regards to claim 17,18,19,20, and 24, Kashimura and Fukuoka et al. discloses the claimed invention except for the range of the width of the tip portion end surface or the flat surface from the side of the groove. It would have been obvious to one having ordinary skill in the art at the time the invention was made to propose with the desired range, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Response to Arguments

Applicant's arguments with respect to claim 1-8 have been considered but are moot in view of the new ground(s) of rejection.

In regards to applicant's remarks that the applicant's invention is caulked less material on page 10 paragraph 4 is not given any patentable weight. The method of forming the device is not germane to the issue of patentability of the device itself.

In regards to applicant's arguments on page 14, of a change in size of the components results in improvement of the device is a choice of one skilled in the art to choose a desired range. See In re Aller.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is (703) 305-2723. The examiner can normally be reached on M-Th (6:30-3:30), and every other Friday.

Application/Control Number: 09/734,579


Page 9

Art Unit: 2834

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Heba Elkassabgi
October 18, 2002



NESTOR RAMIREZ
SUPERVISOR
ART UNIT 2834
(703) 308-1371